Claims

1. A printing press (01) with a least one printing unit (09), on which a web (06) of material to be imprinted can be printed at variable section lengths by means of offset printing, characterized in that at least one folding apparatus (21), whose section length can be changed, is indirectly or directly assigned to the printing unit (09).

2. The printing press in accordance with claim 1, characterized in that at least one cutting cylinder pair (42) is provided in the folding apparatus (21) which forms a gap through which the web (06) of material to be imprinted can be conducted.

3. The printing press in accordance with claim 2, characterized in that the cutting cylinder pair (42) is driven at a preset speed independently of the web speed of the web (06) to be imprinted.

4. The printing press in accordance with claim 2 or 3, characterized in that the cutting cylinder pair (42) is driven clocked in accordance with the clock rate of at least one forme cylinder (26) or transfer cylinder (07) in a printing unit (09).

5. The printing press in accordance with one of claims 2 to 4, characterized in that the cutting cylinder pair (42) is driven at a pre-set ratio of numbers of revolution in respect to the number of revolutions of a forme cylinder (26) or transfer cylinder (07) in a printing unit (09).

6. The printing press in accordance with one of claims 1 to 5, characterized in that a collection cylinder (44), which has two multi-armed instrument supports which can be displaced in respect to each other, is provided in the folding apparatus (21).

7. The printing press in accordance with one of claims 1 to 6, characterized in that the folding apparatus (21) has a drive mechanism which is independent of the other functional elements of the printing installation (01).

8. The printing press in accordance with claim 7, characterized in that servo motors (47) which can be regulated are provided in the drive mechanism of the folding apparatus (21) as drive motors.

9. The printing press in accordance with one of claims 1 to 8, characterized in that the cylinder portion and the delivery device of the folding apparatus (21) can be driven independently of each other by means of separate drive motors.

10. The printing press in accordance with one of claims 1 to 9, characterized in that a folding jaw cylinder (46), which can be provided with springs, is provided in the folding apparatus (21).

11. The printing press in accordance with one of claims 1 to 10, characterized in that a folding blade cylinder is arranged in the folding apparatus (21).

12. The printing press in accordance with one of claims 1 to 10, characterized in that the folding apparatus is embodied as a variable 5:5 system or 7:7 system.

13. The printing press in accordance with one of claims 1 to 12, characterized in that the folding apparatus is embodied in the manner of a cover folding apparatus.

14. The printing press in accordance with one of claims 1 to 13, characterized in that the web (06) to be imprinted is printed by means of a wet offset method in the printing unit (09).

15. The printing press in accordance with one of claims 1 to 13, characterized in that the web (06) to be imprinted is printed by means of a waterless offset method in the printing unit (09).

16. The printing press in accordance with one of claims 1 to 15, characterized in that the printing unit (09) has selectively interchangeable forme cylinders (26), wherein the various forme cylinders (26) respectively have different diameters.

17. The printing press in accordance with one of claims 1 to 16, characterized in that the printing unit (09) has selectively interchangeable transfer cylinders (27), wherein the various transfer cylinders (27) respectively have different diameters.

18. The printing press in accordance with claim 16 or 17, characterized in that the forme cylinders (26) and/or the transfer cylinders (27) have a cylinder circumference of 1156 mm, 1260 mm, 1320 mm and/or 1410 mm.

19. The printing press in accordance with one of claims 16 to 18, characterized in that a frame (23) is provided on the printing unit (09), on which interchangeable modules (24) can be fastened, wherein at least one forme cylinder (26) and/or at least one transfer cylinder (27) of different diameter is seated in different modules (24).

20. The printing press in accordance with claim 19, characterized in that the forme cylinders (26) and/or transfer cylinders (27) are adjustably seated in the module (24).

21. The printing press in accordance with claim 1, characterized in that the inking system rollers and/or dampening system rollers are set by means of pneumatic roller locks.

22. The printing press in accordance with one of claims 19 to 21, characterized in that the interchangeable modules (24) are fixed in place in the frame (23) by means of a fitting system.

23. The printing press in accordance with one of claims 19 and 22, characterized in that the interchangeable modules (24) are connected by means of a quick-release system with the air supply and/or the water supply and/or the electrical supply of the frame (23).

24. The printing press in accordance with one of claims 19 to 23, characterized in that two forme cylinders (26) and two transfer cylinders (27) which form a printing gap are provided in the interchangeable modules (24).

25. The printing press in accordance with claim 24, characterized in that two forme cylinders (26) and two transfer cylinders (27) and one satellite cylinder are arranged in the modules (24).

26. The printing press in accordance with claim 24 or 25, characterized in that a module (24) with or without a satellite cylinder can be selectively inserted into a printing unit.

27. The printing press in accordance with claim 25, characterized in that a module (24) can be operated as an imprinter for a flying plate change.

28. The printing press in accordance with claim 24, characterized in that two modules (24) can be interchangeably operated as an imprinter for a flying plate change.

29. The printing press in accordance with one of claims 19 to 24, characterized in that a transport system (30) is provided in the printing installation (01) for transporting a module (24) released from the frame (23) of a printing unit (09).

30. The printing press in accordance with claim 29, characterized in that the transport system (31) is designed as a crane system, in particular in the manner of a gantry crane.

31. The printing press in accordance with one of claims 1 to 30, characterized in that at least one inking system (28) is provided in the printing unit (09).

32. The printing press in accordance with claim 31, characterized in that an inking system (28) has several inking system rollers.

33. The printing press in accordance with one of claims 1 to 32, characterized in that at least one dampening system (29) is provided in the printing unit (09).

34. The printing press in accordance with claim 33, characterized in that a dampening system (29) has several dampening system rollers.

35. The printing press in accordance with one of claims 19 to 34, characterized in that the inking systems (28) and/or the dampening systems (29) are arranged outside of the module (24) in the frame (23) of the printing unit (09).

36. The printing press in accordance with one of claims 19 to 35, characterized in that, for the rotatory driving of the functional elements (28, 29) seated in the frame (23), at least their own drive mechanism, which is independent of the frame (23), is arranged in the frame (23).

37. The printing press in accordance with one of claims 19 to 36, characterized in that, for driving the functional elements (26, 27) seated in the module (24), their own drive mechanism,

which is independent of the frame (23), is provided in the module (24).

38. The printing press in accordance with claim 1, characterized in that at least its own drive mechanism (47) for the rotatory driving of at least one cylinder of the folding apparatus (21) independently of the printing unit (09), is provided in the folding apparatus.

39. The printing press in accordance with claim 7, 9, 36 or 38, characterized in that at least one positionally-regulated electric motor (47) is provided as the drive mechanism (47).

40. The printing press in accordance with claim 19, characterized in that the module (24) has its own closed oil chamber.

41. The printing press in accordance with claim 19, characterized in that the frame (23) has a closed oil chamber.

42. The printing press in accordance with one of claims 1 to 41, characterized in that web of material to be imprinted of a width of more than 2000 mm, in particular a width of 2520 mm, can be processed in the printing installation (01).

43. The printing press in accordance with one of claims 1 to 42, characterized in that several printing units (09), in particular at least four printing units (09), are provided in the printing installation (01).

44. The printing press in accordance with claim 43, characterized in that a moving web (06) of material to be printed can be imprinted in several printing stages, in particular in several colors, by means of a plurality of printing units (09).

45. The printing press in accordance with one of claims 1 to 44, characterized in that a roll changer (07) is provided in the printing installation (01).

46. The printing press in accordance with claim 45, characterized in that drive belts (33) and/or support straps (32) for supporting the roll (11) of material to be imprinted and seated in the roll changer (07) are provided on the roll changer (07).

47. The printing press in accordance with claim 46, characterized in that the support straps (32) can be driven by means of a drive mechanism.

48. The printing press in accordance with one of claims 1 to 47, characterized in that a conditioning device (08) for conditioning the web (06) to be imprinted, in particular for regulating the web tension and/or for regulating the web edges, is provided in the printing installation (01).

49. The printing press in accordance with one of claims 1 to 48, characterized in that a drying installation (13) is provided in the printing installation (01).

50. The printing press in accordance with claim 49, characterized in that a web (06) of material to be imprinted, which had been printed in several stages one after the other in a plurality of printing units (09), can be dried in the drying installation (13).

51. The printing press in accordance with claim 49 or 50, characterized in that a cooling device (14) for cooling the printed web (06) of material to be imprinted is provided in the drying installation (13).

52. The printing press in accordance with one of claims 49 to 51, characterized in that a dampening device (16) for moistening the printed web (06) of material to be imprinted is provided in the drying installation (13).

53. The printing press in accordance with one of claims 1 to 52, characterized in that a draw-in and/or cutting device (18) is provided in the printing installation (01).

54. The printing press in accordance with one of claims 1 to 53, characterized in that a turning device (19) is provided in the printing installation (01).

55. The printing press in accordance with one of claims 1 to 54, characterized in that a former (22) for the longitudinal folding of the web (06) of material to be imprinted is provided in the printing installation (01).

56. The printing press in accordance with claim 55, characterized in that at least one former (22) is equipped with a gluing device for gluing a longitudinal fold.

57. The printing press in accordance with one of claims 1 to 56, characterized in that a superstructure system (34, 36, 37, 38, 39) is provided in the printing installation (01), in particular a superstructure system (34, 36, 37, 38, 39) of asymmetrical, symmetrical or compact construction.

58. The printing press in accordance with claim 57, characterized in that at least one former for longitudinal folding of the web (06) to be imprinted and/or at least one turning bar for changing the direction of the web (06) to be imprinted is provided in the superstructure system (34, 36, 37, 38, 39).

59. The printing press in accordance with one of claims 1 to 58, characterized in that at least one web interception device is provided in the printing installation (01).

60. The printing press in accordance with one of claims 1 to 59, characterized in that at least one coating installation (17) is provided in the printing installation (01).

61. The printing press in accordance with one of claims 1 to 59, characterized in that the coating installation (17) is suitable for coating the web (06) of material to be imprinted with a silicon layer.

62. The printing press in accordance with claim 1, characterized in that several printing presses, each with several printing units (09), are placed in parallel, and their webs are processed in a common folding apparatus.

63. The printing press in accordance with claim 1, characterized in that the folding apparatus (21) has a folding blade cylinder (44).

64. The printing press in accordance with claim 63, characterized in that the folding blade cylinder (44) has at least three holding systems for gripping signatures and three associated folding blades, and that the distance between the holding systems and the associated folding blades can be changed.

65. The printing press in accordance with claim 64, characterized in that the holding systems are embodied as gripper systems or spur needle systems.

66. The printing press in accordance with claim 1, characterized in that, in a first operational state with a rubber blanket applied, the transfer cylinder (27) has a first diameter and, in a second operational state with the rubber blanket applied, has a second diameter, wherein the first and second diameters differ by at least 5 mm.

67. The printing press in accordance with claim 1, characterized in that, in a first operational state with a rubber blanket applied, the transfer cylinder (27) has a first diameter and, in a second operational state with the rubber blanket

applied, has a second diameter, wherein the first and second diameters differ by at least 10 mm.

68. The printing press in accordance with claim 1, characterized in that a control device is provided, that this control device sets a distance between the holding system and the folding blade of a folding blade cylinder (44) of the folding apparatus (21) as a function of a diameter of a forme cylinder (26) and/or transfer cylinder (27) by remote control.